

ORIP

OFFICE OF RESEARCH
INFRASTRUCTURE PROGRAMS

Division of Comparative Medicine



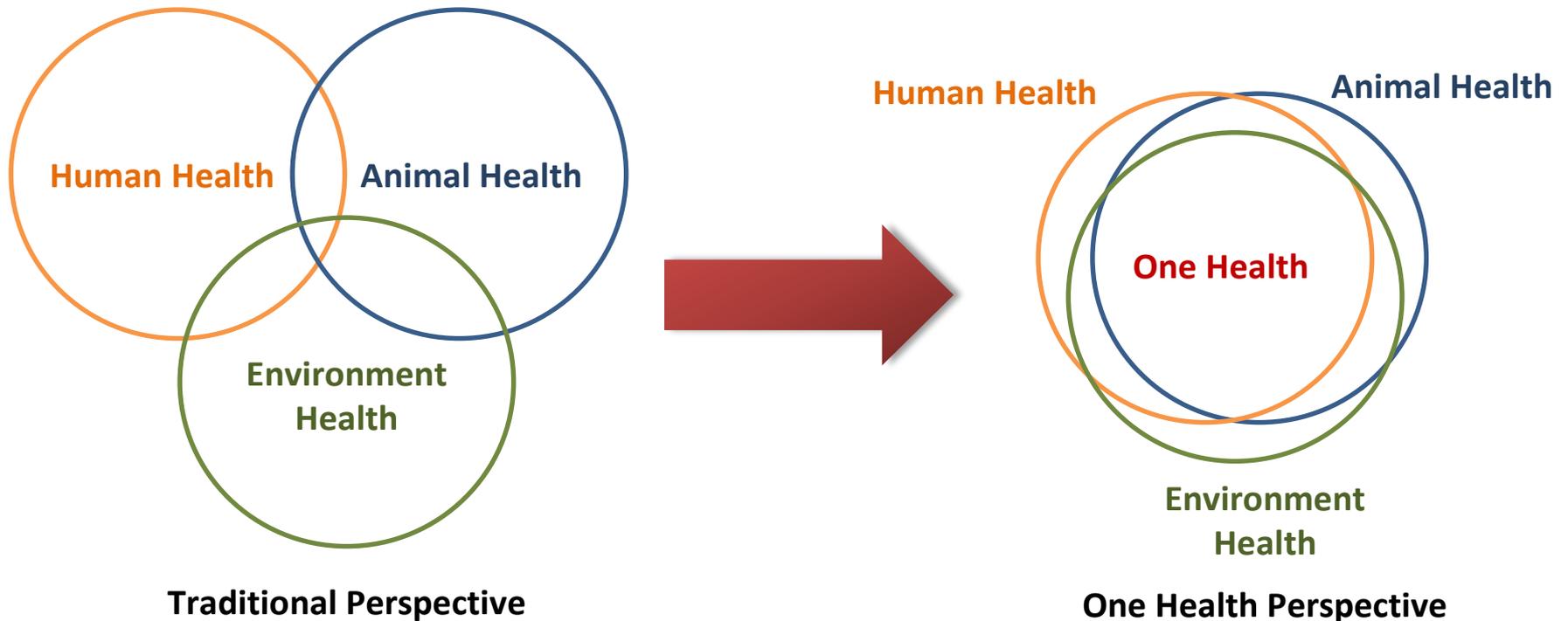
***Workshop Summary – One Health: Integrating The Veterinarian
Scientist Into The Biomedical Research Enterprise***

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ORIP/DPCPSI/OD/NIH***



One Health Concept

One Health is the integrative effort of multiple disciplines working together to attain optimal health for people, animals and the environment.



Communication Challenge – One Health Concept Advancing The NIH Mission

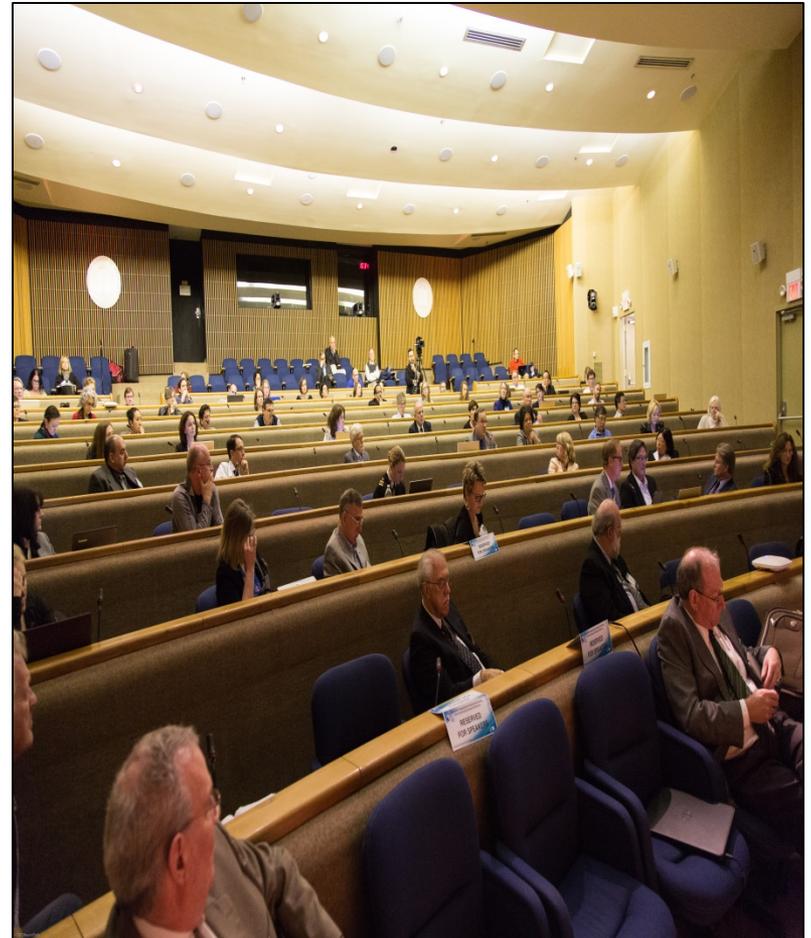
Meeting Organizing Committee

- **ORIP:** Manuel Moro, DVM, PhD; Jack Harding, PhD; Stephanie Murphy, VMD, PhD
- **Peter Ernst**, DVM, PhD (University of California, San Diego)
- **James Fox**, DVM (MIT)
- **Michael Kent**, PhD (Oregon State University)
- **Deborah Kochevar**, DVM, PhD (Tufts University)
- **Andrew Lackner**, DVM, PhD (Tulane National Primate Research Center)
- **Ronald Sokol**, MD (University of Colorado)
- **Susan VandeWoude**, DVM (Colorado State University)



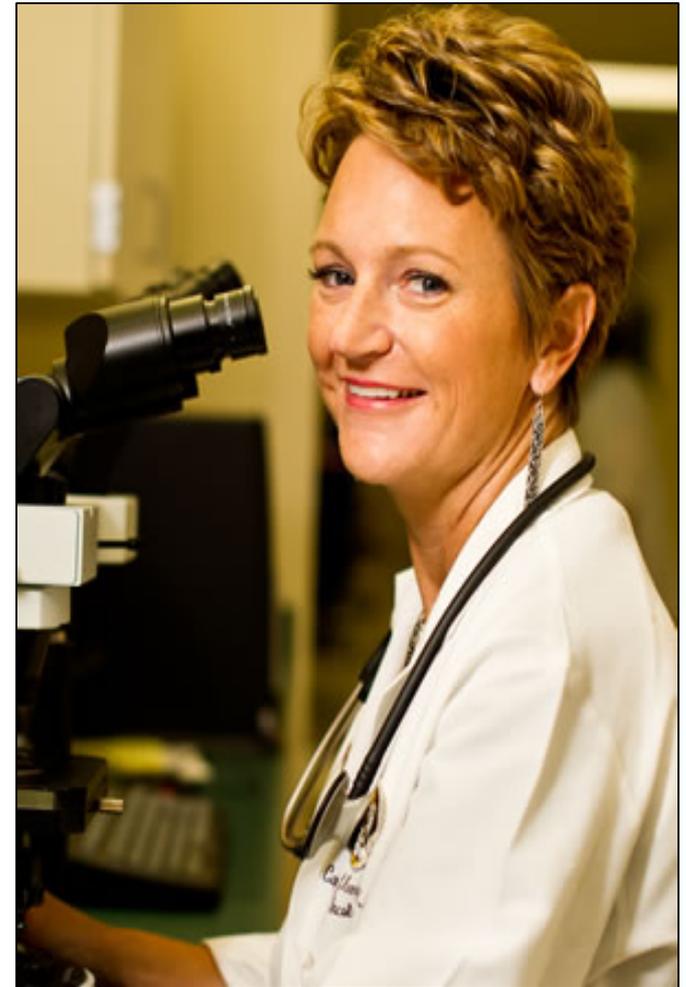
Workshop Details

- April 7-8, 2015 at the NIH Main Campus (Lister Hill Center), Bethesda, MD
- Objective: Provide information and advice on how the One Health concept can advance the NIH mission regarding research programs and training
- 34 speakers and over 170 registered participants
 - ✓ NIH program and review staff from 20 NIH Institutes, Centers, and Offices
 - ✓ Representatives from federal agencies including CDC, FDA, and USDA
 - ✓ NIH-supported extramural and intramural researchers
 - ✓ Representatives from the private sector



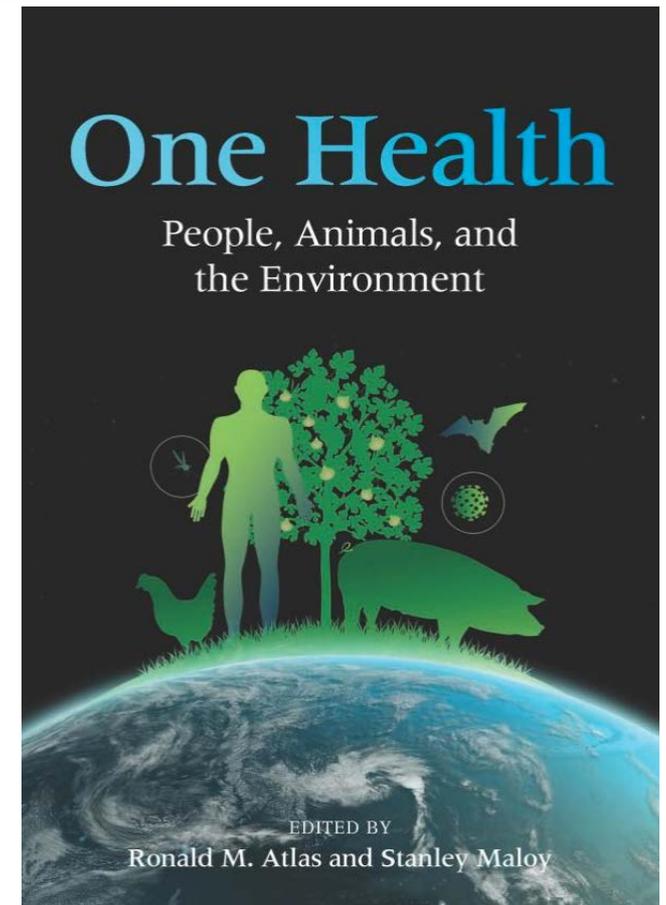
Keynote Presentation

- Carolyn Henry, DVM (University of Missouri)
 - ✓ Associate Director of Research for the Ellis Fischel Cancer Center, University of Missouri Health System
 - ✓ Associate Dean for Research & Graduate Studies at the College of Veterinary Medicine
 - ✓ Professor of Oncology, College of Veterinary Medicine and the School of Medicine
- One Health Challenges for the 21st Century
 - ✓ Refining the definition of One Health
 - ✓ Changing the culture of science and medicine as it relates to One Health
 - ✓ Communicating the One Health message effectively
 - ✓ Better predicting and preparing for the future with regard to One Health issues



Session Topics

- Case studies from multi-disciplinary teams using animal and human subjects to study infectious diseases, cancer, and neurological diseases, among others
- One Health panel perspectives from various centers, federal agencies and biopharma
- Panel discussions on NIH-supported training programs that utilize the One Health concept, including ways to improve training of multi-disciplinary teams



Atlas RM, Maloy S, Eds. 2014. One Health: People, Animals, and the Environment. ASM Press, Washington, D.C.

Participant Recommendations

- Training

- ✓ Medical Scientist Training Program (MSTP) slot expansion
- ✓ Separate Veterinary MSTP program
- ✓ Need for comparative training in alternative models
- ✓ Need for training outcomes data
- ✓ Unique T and F training programs for veterinary students and veterinarians
- ✓ Loan repayment program for public practice veterinarians in One Health areas
- ✓ Collaborations across federal agencies in areas of need

Participant Recommendations

- Pipeline
 - ✓ National student mentoring networks are needed to address role of veterinarians in research
 - ✓ Promote examples of longitudinal veterinarian scientist training “tracks” that are accessible
- Strategic planning
 - ✓ Leverage Physician-Scientist Workforce Working Group Report and its recommendations

Participant Recommendations

- Addressing high impact health challenges
 - ✓ National clinical studies platform utilizing naturally occurring animal diseases
 - ✓ Development and support for naturally occurring animal disease approaches
 - ✓ Broaden research agenda to include impact of human-animal interactions on human health
 - ✓ Leveraging existing consortia
- Leverage current inter-agency collaborations
 - ✓ NIH and USDA/National Institute of Food and Agriculture
 - ❖ PAR-13-204 Dual Purpose with Dual Benefit: Research in Biomedicine and Agriculture Using Agriculturally Important Domestic Animal Species (R01)
 - ✓ NIH and NSF
 - ❖ NOT-TW-14-009 NIH-NSF Ecology And Evolution Of Infectious Diseases Program: A Joint Program For Multidisciplinary Research

Outcomes For Other ICs And Organizations

- Fogarty International Center
 - ✓ May/June 2015 newsletter highlighted One Health workshop and how NIH encourages veterinarians to consider research careers
- CTSA One Health Alliance (COHA)
 - ✓ Comprised of 10 veterinary schools partnered with medical and other colleagues through CTSA
 - ✓ Preparing proposals in response to PAR-15-173: Pre-Application for Collaborative Innovation Award, CTSA Program (X02) utilizing One Health concepts discussed at workshop
- Association of American Veterinary Medical Colleges
 - ✓ Developing communication channels and resource sharing opportunities between Federal agencies regarding One Health
 - ✓ Collecting data and metrics on long-term outcomes of biomedical research training programs for veterinarians

Outcomes And Opportunities For DCM/ORIP

- ORIP website
 - Meeting summary: <http://dpcpsi.nih.gov/orip/cm/reports>
 - Video recording of workshop
- Potential funding opportunity announcements (FOA)
 - ✓ Development of reagents and biological tools to characterize naturally occurring disease conditions in cats and dogs that can inform or be used for the assessment of parallel disease states in humans (SBIR/STTR)
 - ✓ Competing or administrative supplements for DCM/ORIP-supported resources to engage veterinarian scientists
- Develop summary paper on the role and impact of veterinarian scientists in multi-disciplinary teams to enhance visibility of veterinarian scientists and the One Health concept as applied to NIH mission

Outcomes And Opportunities For DCM/ORIP

- Expand training portfolio to include participation on parent F32 FOA
 - ✓ Would extend support of veterinarian scientist postdoctoral trainees at the individual as well as institutional levels
- Expand research program grant portfolio to include R03 mechanism
 - ✓ Would provide transition support between K01 and first R01 in veterinarian scientist career pathways
- Identify and summarize available mentoring resources for developing veterinarian scientists at ORIP website